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(54) Title: PLASMA REACTOR WITH OVERHEAD RF ELECTRODE TUNED TO THE PLASMA

(57) Abstract: In accordance with one aspect of the invention, a plasma reactor has a capacitive electrode driven by an RF power source, and the electrode capacitance is matched at the desired plasma density and RF source frequency to the negative capacitance of the plasma, to provide an electrode plasma resonance supportive of a broad process window within which the plasma may be sustained.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 01/08882

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H01J37/32

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 H01J H05H

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

WPI Data, PAJ, EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P, A	US 6 162 709 A (RAOUX SEBASTIEN ET AL) 19 December 2000 (2000-12-19) column 6, line 10 - column 10, line 7 column 16, line 66 - column 18, line 58; figures 1,5 & WO 99 28524 A (APPLIED MATERIALS INC) 10 June 1999 (1999-06-10)	1, 37, 41, 64, 73, 89
A	US 5 077 499 A (OKU KOUJI) 31 December 1991 (1991-12-31) abstract; figures	1, 37, 41, 64, 73, 89
A	US 5 705 019 A (YAMADA MINORU ET AL) 6 January 1998 (1998-01-06) the whole document	1, 37, 41, 64, 73, 89

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Date of the actual completion of the international search

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
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